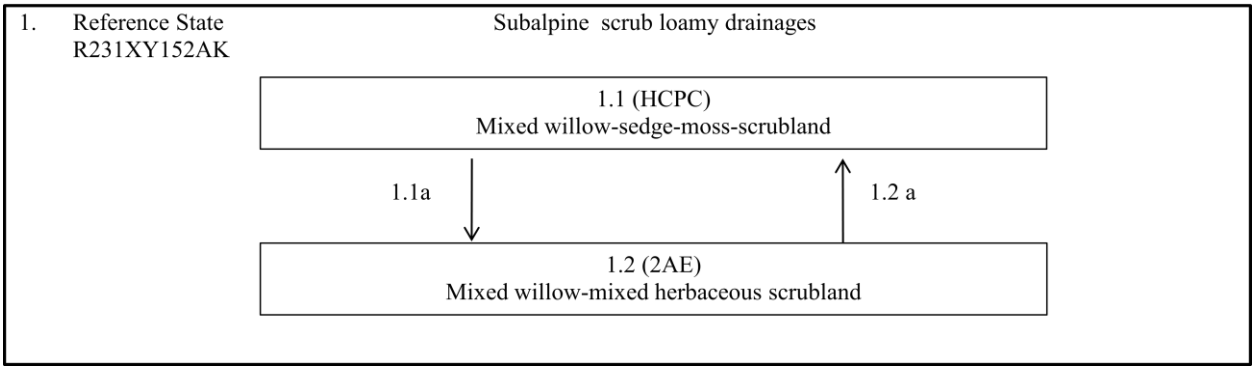
Ecological Site Description ID:	R231XY152AK

Ecological Dynamics of the Site:

This subalpine ecological site was observed in mountain drainages at high elevation (i.e. between 850 and 1250 meters). Soils lacked permafrost and were saturated at depth. For community phase 1.1, soils were classified as cryaquents and were composed of gravelly alluvium. Sites were characterized as willow scrubland occurring directly adjacent to flowing water. Bare sand and gravel bars were commonly observed and supported development of phases linked to a flood regime. Albeit, sand and gravel bars were also absent from many sampled drainages. The presence or absence of bars likely results from the severity of recent flood events. No alternate states were observed.

State and Transition Diagram:



State ID Number:	1	State Name:	Reference

State Narrative:	For climax phase, dominant vegetation was a mixture shrubs, graminoids, forbs, and moss. While all sites were labeled as scrubland, the dominant shrub stratum varied between tall, medium, and low shrub species. A general trend in the data indicated that as elevation increases, shrub dominance moves from tall to low shrub species. The majority of points occurred in areas dominated by medium shrub species. Tall shrubs are defined to grow greater than 10’ in height, medium shrubs are defined to grow 3-10’ in height, low shrubs are defined to grow 8” – 3’ in height, and dwarf shrubs are defined to grow less than 8” in height.

Photo 1.1			
Community Phase Number:	1.1	Community Phase Name:	Mixed willow-sedge-moss-scrubland
Community Phase Narrative:			
Picea glauca was observed but at trace levels. Shrubs were the dominant form of vegetation and were estimated to cover >50% of plots. When pooling data across an elevational gradient, shrubs were evenly distributed across the tall, medium, low, and dwarf shrub stratums. As mentioned above, elevation likely dictates the dominant shrub stratum. The most common tall and medium shrubs were *Salix alaxensis* and *Salix pulchra.* The most common low shrubs were *Betula glandulosa, Salix pulchra,* and *Dasiphora fruticosa. Graminoids were abundant often exceeding 25% cover in plots and were a mixture of grasses and sedges. The most common species were Calamagrostis canadensis, Carex aquatilis, and Carex bigelowii. Forb diversity was high but no individual species was dominant. Moss was an abundant ground cover. This phase had 13 observations.*			

Community Pathways	
Pathway Number	Pathway Name & Description
1.1a	Flood event that scours drainage surface and/or deposits fresh alluvial material. When compared to the climax phase community, early flood phase communities had much greater exposed mineral soils likely due to recent flood events.

Photo 1.2			
Community Phase Number:	1.2	Community Phase Name:	Mixed willow-mixed herbaceous scrubland
Community Phase Narrative:			
When compared to climax phase community, the early flood phase had less shrub, graminoid, forb, and moss cover. Shrubs were the dominant form of vegetation. Shrubs occurred primarily in the medium and low shrub stratums and common species were *Salix bebbiana*, *Salix pulchra*, *Salix alaxensis*, and *Dasiphora fruticosa*. Common graminoid and forb species were *Calamagrostis canadensis, Carex sp*., *Equisetum sp*., and *Chamerion latifolium*. This phase was limited to 2 observations.			

Community Pathways	
Pathway Number	Pathway Name & Description
1.2 a	Normal time and growth without flooding.